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EMPLOYMENT, WAGES AND IMMIGRATION IN THE EUROPEAN UNION:
ECONOMETRIC MODELS AND COMPARISON WITH THE USA, 1960-2003

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Abstract

Some of the main challenges for European Union at the beginning of the 21st century are to increase the rates of employment and the real wages, particularly in those regions and economic sectors with the lowest levels, as well as to develop realistic policies of net immigration, which should have into account the limitations of EU for employment creation and growth of real Gdp, in order to avoid diminutions of average wages and social services expenditure per inhabitant. We estimate some econometric models which explain the lower rates of employment and wages of Europe in comparison with the USA, analyse those differences during the period 1960-2003 and suggest some changes in EU policies in order to increase both average wages and the rates of employment. EU immigration policies should be realistic and limited to the capacities of jobs creation, and the international cooperation of EU with developing countries should be more focused to foster investments and to increase employment and income per inhabitant in the countries of origin of immigrants.

JEL classification

Keywords

1. Introduction

European Union has experiencing some degree of economic stagnation and difficulties to get employment even for young people with high educational levels. Opinion polls show a great concern of European population in this regard, both in the former EU15 countries and in the another 10 European countries which have jointed the EU after the enlargement of year 2004. Here we present the results of an economic research aimed to improve labour policies in all the countries and regions of the EU.

Section 2 presents an overview of selected literature on this subject. Section 3 analyses the evolution of employment, rates of employment per one thousand inhabitants, average wages and immigration data. Section 4 present the estimation of some econometric models which explain the lower rates of employment and real wages of European Union in comparison with the USA. Finally Section 5 present some suggestions regarding the improve of the labour market in European countries, and present the main conclusions.

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2. Economic literature on labour markets: employment and wages in EU and the USA.

Here we present a reference to some representative studies of the main variables which explain the differences in employment and wages among countries, particularly among European Union and the United States. Some interesting studies, among others, are referred to in the bibliography or analysed in the cited articles.

Regarding the negative effects of wages and bureaucratic rigidities, Krueger and Psichke(1997) present an interesting analysis of the advances of US's policies regarding the labour market in an international perspective, and conclude that product market constraints and other rigidities of European countries explain their lower performance in comparison with the US, while the lower wages in EU do not show an important role to increase the rates of employment. Card, Kramarz and Lemieux, found little evidence of wage inflexibilities to generate divergent patterns of employment growth in a comparison of the US, Canada and France. Nickell, Nunziata, Ochel and Quintini(2001) also analyzes unemployment and wage in OECD countries from 1960s to the 1990s, and Peeters and Reijer(2002) did not find a stronger real wage flexibility of the US in comparison with four European countries, in their study of wage and unemployment in Germany, Spain, France, the Netherlands and the US.

The effects of taxation are analysed for several authors, as Riphahn and Bauer(1998) who test the possible negative impact of high payroll taxes in Germany, in particular social insurance contributions, and if they could explain the growing unemployment problem. Using industry level data for 1977-1994 they conclude that the employment effects of payroll taxes have only a moderate effect and that they are not the main causes of unemployment. Daveri and Tabellini(1997) analyse the effects of higher taxes on labor for 14 industrial countries between 1965 and 1991 and find striking support for the negative effects of high taxes, which reduce the growth rate of Gross Domestic Product and as a consequence affect negatively to the evolution of employment.

Freeman(2001) analyses Okun's law for a panel of ten industrial countries, founding an estimation of one percent reduction in the unemployment rate per two points of real Gdp growth. The article finds that the omission of capital and labour inputs may have biased previous estimates of three points of real Gdp growth related with one percent point of diminution in unemployment.

Regarding the relation between employment and human capital, there are some interesting studies, as that by Tondl(1999) and Guisan and Aguayo(2005), trying to explain the uneven growth of Europe's poorer regions, having into account the low levels of human capital expenditure, and recommending higher support to human capital from EU and national institutions to those regions.

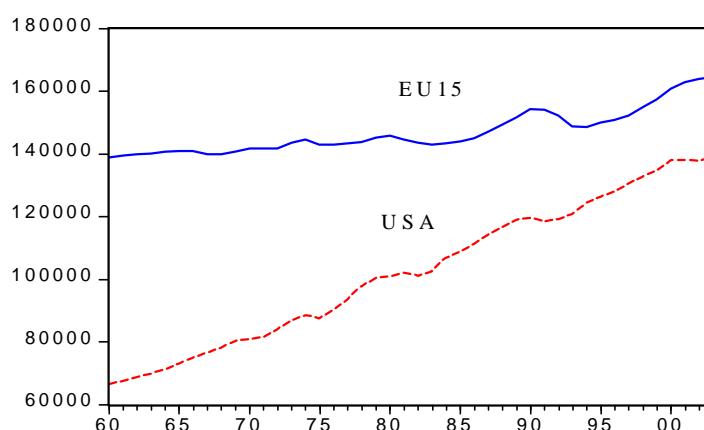
In our view, European policies have not given place to enough discussion among researchers and politicians in EU, mainly due to the bureaucratic orientation of some EU institutions, more linked to the national governments and parties bureaucracies than to the European opinion of citizens. In our view one of the main challenges of EU is to increase the communication among citizens, the EU Parliament and EU policy makers, what in some cases imply a change in the selection process (both electoral and not electoral), in order to have into account at a greater extent the public opinion demands for better policies of employment. We hope that in the next years there will be an increasing concern of EU citizens in this regard and EU institutions perhaps will answer to the public opinion demands, improving their

employment policies. Economic advisors of EU institutions have an important role to show policy makers the right measures to improve the rates of employment, real wages and general well-being of EU population.

2. Employment, wages and immigration in the EU and the USA, 1960-2003

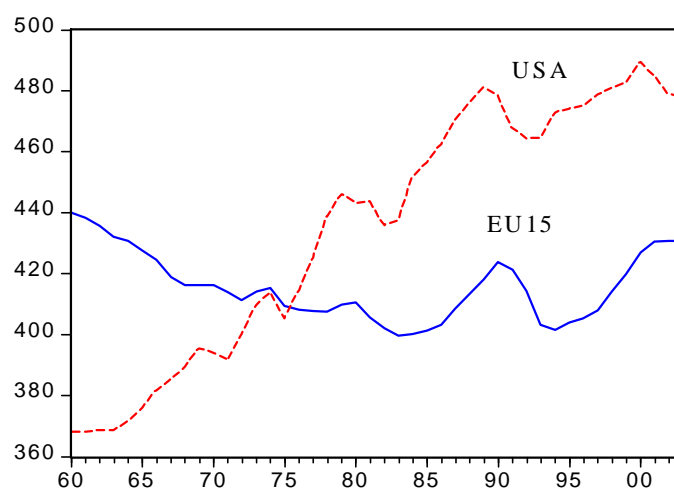
Graphs 1 and 2 presents the evolution of employment in EU15 and the USA during the period 1960-2003, respectively as total employment, in thousand people, and rate of employment per one thousand inhabitants.

Graph 1. Total employment in EU15 and the USA, 1960-2003
(thousands)



Source: elaborated from Labour Force Statistics, OECD.

Graph 2. Rates of employment in EU15 and the USA, 1960-2003
(employments per one thousand inhabitants)



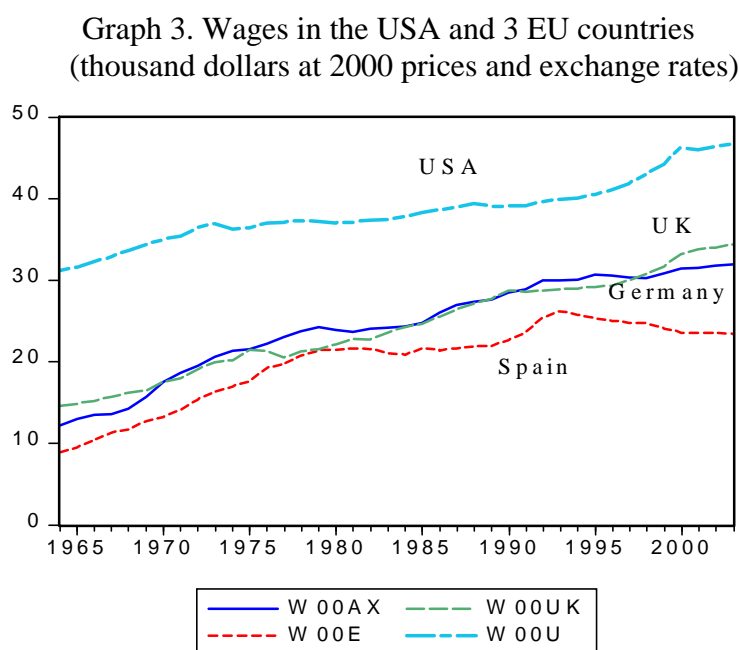
Source: elaborated from Labour Force Statistics, OECD.

Why the rate of employment is lower in the EU? We can notice that total employment in European Union has experienced a low increase while the USA has shown a high capacity of job creation. It is clear that European Union has much higher density of population per square kilometer than the USA, and the possibilities to increase this density are more limited, but it is

also clear that better economic policies in EU could be of great help in this regard. More moderate fiscal policies, more expenditure on human capital (including education and research), and a general higher support to jobs creation, with less bureaucratic obstacles to development initiatives, have paved the way of the USA to get higher levels of employment and higher wages than EU average.

What about wages? Some people and policy makers say that to lower wages is a good solution to foster employment, but this is not the real case when we compare the average situation in Europe and the USA, because in spite of higher real wages the USA has much higher rates of employment.

Graph 3 shows the evolution of average real wages in some EU countries and the USA.



Note: Wage is the ratio between Compensation of Employees (National Accounts), and the number of employees, (Labour Force Statistics). This variable represents the cost per worker, including some taxes and social security charges, and is higher than the wage received by the worker. Source: Elaborated from OECD statistics.

The comparison of EU countries with the USA shows that both wages and rates of employment can increase if a country has a high degree of development and adequate labour policies. The lower degree of development of EU in comparison with the USA is very much related to the lower expenditure of EU on human capital (particularly on education and research). Regarding labour policies, immigration policies and government charges on labour present more problems in the UE than in the USA. The USA has an immigration policy planned accordingly to the capacity of jobs creation without diminution of the average income and wages, while some countries of EU have shown more problems, as it is the case of Spain, with levels of net migration higher than the capacity of jobs creation, during the decade 1993-2003, with the consequence of a diminution of average wage. Real wage of Spain in comparison with the USA, expressed in constant dollars of year 2000 at exchange rates, has decreased from 66% in 1993 to 50% in 2003.

Net migration is the difference between the number of immigrants arriving in a country and the number of emigrants that left the country to live in another countries. Net migration should be usually related with the capacity of a create to increase employment and income per

inhabitant. The ratio net migration/net employment creation has been more moderate in the USA than in the EU. Table 1 and graph 4 show the evolution of net migration in EU countries, for the period 1966-2000.

Table 1. Net migration in the EU 25, for the period 1966-2000

Country	66-70	71-75	76-80	81-85	86-90	91-95	96-00	65-00
Austria	50	78	2	28	137	262	45	602
Belgium	52	74	22	-35	52	85	99	349
Cyprus	0	-31	-29	-3	-2	16	29	-20
Czech Republic	-29	0	71	7	-3	38	52	136
Denmark	17	17	15	10	30	58	84	231
Estonia	47	36	19	27	30	-117	-46	-4
Finland	-103	23	-36	23	16	43	20	-14
France	516	481	184	261	272	424	219	2357
Germany	803	889	329	-108	1956	2688	1134	7691
Greece	-188	-72	278	64	155	470	300	1007
Hungary	3	-8	-8	-66	-123	101	100	-1
Ireland	-67	53	42	-64	-148	-1	89	-96
Italy	-430	-121	87	-146	10	573	600	573
Latvia	54	61	38	37	94	-174	-56	54
Lithuania	24	38	19	39	52	-100	-109	-37
Luxembourg	4	21	6	2	8	19	20	80
Malta	-13	-11	6	7	2	5	6	2
Netherlands	55	152	168	55	151	190	161	932
Poland	-196	-216	-208	-114	-202	-77	-71	-1084
Portugal	-822	10	292	-12	-158	-7	175	-522
Slovak Republic	-44	-4	-7	-19	-35	9	9	-91
Slovenia	-22	17	34	17	21	38	8	113
Spain	-213	-73	225	-107	292	500	676	1300
Sweden	130	19	83	27	132	151	60	602
United Kingdom	-259	-146	-35	-7	104	381	574	612

Source: Elaborated from World Bank(2005).

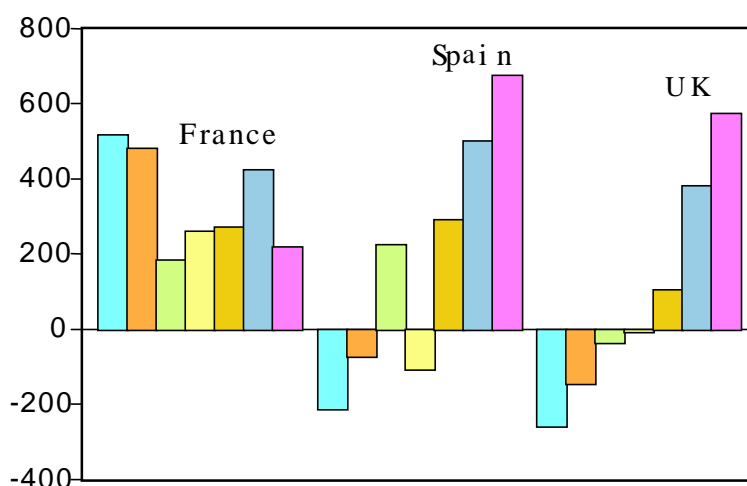
The higher values of net migration during the period 1966-2000 correspond to Germany, France, Spain, Greece and the Netherlands. The EU countries that have increased their population through migration sum up 16.64 million of new inhabitants during that period, while the countries with a negative value of net migration have diminished their population in 1.85 million of inhabitants. This show that net migration is low within EU countries, while the majority of immigrants come from outside the European Union.

The most outstanding EU country in net migration has been Germany, accordingly to its higher capacity of employment creation and the policies addressed to avoid stagnation of population. In fact population in Germany has increased by 6.7 million inhabitant during the period 1965-2000 and without immigration it would be diminished by 1 million in comparison with 1965. The problem of Spain is different, because its rate of employment is lower than in Germany, and natural growth of population has been higher than in Germany, with an increase of 8.4 million of inhabitants in that period (7.1 million from natural growth and 1.3 million from net migration).

Graph 4 shows the evolution of net migration in France, the United Kingdom and Spain during the period 1966-2000 by quinquennial periods. The most outstanding values

correspond to Spain, country which has increased the number of net migrations far beyond its capacity not only for job creation but also for social services expenditure. The low values that Spain has in health expenditure per inhabitant, mainly through social security services, in comparison with OECD countries, has not increased, and in some cases have even diminished, due to the increase of demand beyond the increase of supply of those services.

Graph 4. Net migration: 1966-1970 to 1996-2000
(thousand people)



Note: Immigrants less emigrants. Elaborated from WB(2005). Data for 5 years periods: 66-70, 71-75, 76-80, 81-85, 86-90, 91-95 and 96-00.

Data for the period 2001-2005 are only partially available, and they show that some European countries like Spain, have shown an increase in the number of net migration per year, in spite of the limited capacity of this country to increase the rates of employment and the average wage in real terms. The number of immigrants per year in Spain has increased from around 20 thousand in 1995 to more than 300 thousand in year 2000 and more than 600 thousand per year in 2004 and 2005, clearly beyond the economic capacity of the country. A more detailed analysis of Spanish labour market and immigration is presented in Guisan(2005).

Eurobarometer and other public opinion polls show a clear concern of population regarding the uneven evolution of net migration from outside the EU in comparison with job creations. Over immigration increases the rate of unemployment and may be a cause of diminution of real wages and social expenditure per inhabitant. European public opinion clearly demands an improvement in external immigration policies, in order to moderate net migration, having into account the labour market capacity, among other factors.

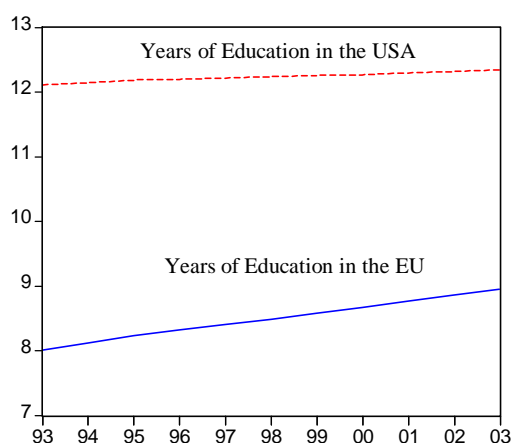
The higher value of real Gdp per inhabitant in the USA, in comparison with European Union, explains the higher value of real wages, and its higher capacity to increase employment explains its higher capacity to accept immigrants. Net migration in the USA has been of 27.4 million people during the period 1966-2000, and in general terms has been positive for economic growth thanks to the high capacity of this country to increase employment, compatible with increases in real wages and real income per inhabitant. Immigration policies has been adapted to the economic circumstances. As we can notice in

graphs 1 and 2 the creation of employment is rather moderate in the EU and that circumstance do not favour the increase of net migration from outside EU countries. Another thing is to favour freedom of labour movements within EU citizens, which should be generally accepted.

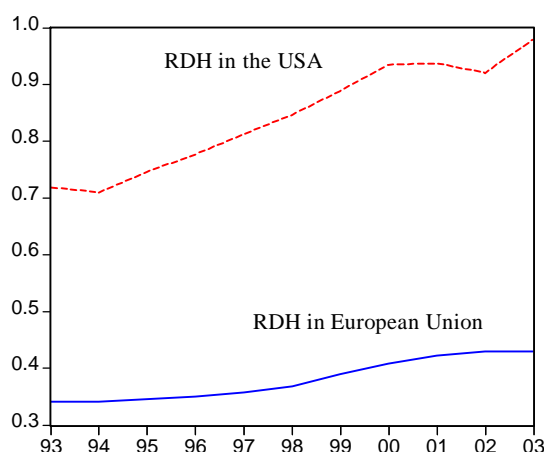
European Union should develop economic policies aimed to reach higher employment rates, and increase real wages and real income per inhabitant in all their regions, similar to those of the USA, and for that purpose it is interesting to insist upon the convenience to get a higher support from EU institutions and national governments to human capital development, both regarding Education and Research and Development, RD, as both variables have usually a positive impact on economic development, and they are the main difference between the EU and the USA. To foster employment, also some policies have been recommended in several interesting studies and by OECD(1998) in order to diminish the strong tax burden on labour.

Graphs 5 and 6 show that European Union is clearly below the USA in support to human capital in two important indicators: the average years of education of adult population and RD expenditure per inhabitant. EU not only has lower averages values in comparison with the USA, but also great disparities among their regions as has been shown in Guisan, Cancelo and Diaz(1999), Guisan and Aguayo(2005), Guian(2005), among other studies.

Graph 5. Average years of education



Graph 6. RD expenditure per inhabitant



Source: Total years of education per inhabitant from Barro and Lee(2002) and own provisional estimations and Research Expenditure per inhabitant from Eurostat(2005).

Both the rates of employment and average wages are highly dependent on the evolution of real Gdp per inhabitant, and thus the positive impact of human capital on real Gdp per inhabitant makes education and RD expenditure to be selected instruments to reach high rates of employment and real income per inhabitant. Besides the low levels of human capital of Europe in comparison with the USA, there are other factors that explain the lower rates of employment in EU. OECD(1998), particularly relates with the strong taxes related with labour (in a broad sense including not only income tax but also contributions to social security). The *take home pay* percentage of wages, after tax and contributions deduction is as high as 71% in the USA, 73% in the UK and lower in many EU countries: only 52% in Italy, 53% in Germany and 56% in France. It is important to say that, in compensation, the expenditure on private health services and pensions funds is generally lower in EU in comparison with the USA. In any case some moderation in EU charges on labour should be recommended.

4. Econometric models of employment and wages

As analysed in previous studies, the most realistic models of employment (L), have into account demand and supply, and include the effects of real Gross Domestic Product (Gdp), stock of capital (K) and wages (W), besides the increase on the supply of labourers (LS) which is measured by the increase on active population (PA). This perspective represents a synthesis of other approaches and includes in a higher degree than usual the important role of availability of raw materials and other intermediate inputs.

Models only based on the demand side, from a keynesian point of view, stand out the positive role of Gdp and the negative role of K on L, from the point of view of the effect of technology on labour substitution, with a positive role of the increases of w if it contributes to increase Gdp from the demand side. Modelos based on the supply side of primary inputs, from a neoclassical perspective, stand out the positive role of increase in K both on Gdp and L, and the negative role of W if this variables increases at a higher rate than Gdp.

In our perspectives, developed in several previous studies by this and other authors since 1980 to 2005, a disequilibrium approach to economic growth and development must be usually had into account in order to get realistic conclusions. A realistic view of the main relationships usually includes to have into account not only demand nor supply of primary inputs but both demand and supply in a broad perspective: not only from primary inputs but also including other important factors such as intermediate inputs, from domestic and foreign origin, as well as human and institutional capital). Depending on the particular regime of restrictions: demand side, supply of primary inputs, supply of intermediate inputs, or other ones, economic policies to increase rates of employment, wages and real income, should have different priorities, being the most important to distinguish between full capacity case and underutilization of physical capital, accordingly to the following summary of the main relationships:

1) Full capacity: The utilized level of capital (K) is very close to the available level of this variable (KA). This means that there are no restrictions to economic growth from demand and supply of intermediate inputs, only from the production function, and then the neoclassical model, based on the relationship between labour productivity and average wage may be useful to explain the evolution of L* (desired level of employment by firms and institutions). Increases in wages in this case are possible, without diminutions of L*, if investment and production increase properly. Under conditions close to perfect competition, the desired level of labour may be expressed as a function of Gdp and the expected value of average wage (W*):

$$L^* = \delta (Gdp/w^*) \quad (1)$$

being δ a parameter close to α (the elasticity Output/Labour in the production function).

2) No full capacity, or underutilization of capacity. If there are restrictions to full capacity utilization of K, then employment the desired level of employment does not depend on the productivity function. The desired level of employment by enterprises will have the following expression:

$$LE^* = (\gamma Gdp - r^* KA) / w^* \quad (2 a)$$

and the total desired level of employment by enterprises and government will be:

$$L^* = LE^* + LG \quad (2 \text{ b})$$

where the desired level of employments by enterprises depends on the income available for distribution between primary inputs after taxes (γGdp) less the cost of capital (r^* is the average rate of return on available capital) and on the expected value of real wage. The value of γ is high when taxes are low and viceversa. If government uses taxes to finance LG then the effect of taxes on the diminution of LE^* may be compensated with an increase in LG.

Finally, econometric models show that employment depends usually positively on their lagged value, and the increases of both demand of labourers (L^*) and supply of labourers (LS), where L^* is the desired value of employment, well in a regime of full capacity utilization or in the case of underutilization of capacity.

$$L = f(L(-1), D(L^*), D(LS)) \quad (3)$$

where $L(-1)$ is the lagged value of L , and $D(L^*)$ and $D(LS)$ are the first differences of L^* and LS: $D(L^*) = L^* - L^*(-1)$, $D(LS) = LS - LS(-1)$.

The expected values of wages (W^*) may be expressed as a function $w(-1)$, while actual value of average wage (W) highly depends on its past value and the increase on labour productivity:

$$W = f(W(-1) D(Gdp/L)) \quad (4)$$

The following estimated models present a simplified version of this approach for the estimation of (3) and (4). We have omitted the variable K in cases of underutilization of capacity what means that there are some effects of the excluded variable on the estimated coefficients of the included ones, (see Guisan(1997, section 5.2) or other texts on the effects of missing variables in case of linear relationships between the included and excluded explanatory variable).

Data: Gdp is Gross Domestic Product in million dollars at 1990 prices and exchange rates (Annex: GDP90*1000), W90 is average wage in thousand dollars at 1990 prices and exchange rates. Total employment (LT) is the sum of salaried workers and own account workers, and labour supply is measured by the active population (PA). Data have been given by, or calculated from, the OECD National Accounts and Labour Force Statistics. The variables names end in EU when they correspond to 15 countries of European Union and US when they correspond to the United States.

Equation 1. Employment in European Union, 1981-2000

Dependent Variable: LTEU				
Method: Least Squares. Sample(adjusted): 1981 2000				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
LTEU(-1)	0.985232	0.001955	503.8290	0.0000
D(GDPEU/W90EU(-1)	0.404385	0.064756	6.244760	0.0000
D(PAEU)	0.902734	0.220003	4.103281	0.0007
R-squared	0.986694	Mean dependent var		149783.9
Adjusted R-squared	0.985128	S.D. dependent var		5030.149
S.E. of regression	613.4229	Akaike info criterion		15.81347
Sum squared resid	6396889.	Schwarz criterion		15.96283
Log likelihood	-155.1347	Durbin-Watson stat		1.854727

Equation 2. Employment equation in the United States, 1981-2000

Dependent Variable: LTU				
Method: Least Squares				
Sample: 1981 2000				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
LTU(-1)	0.991077	0.003741	264.8935	0.0000
D(GDPU)/W90U(-1)	0.316641	0.050177	6.310515	0.0000
D(PAU)	0.783103	0.263275	2.974467	0.0085
R-squared	0.997285	Mean dependent var		118758.1
Adjusted R-squared	0.996965	S.D. dependent var		11040.24
S.E. of regression	608.1883	Akaike info criterion		15.79633
Sum squared resid	6288182.	Schwarz criterion		15.94569
Log likelihood	-154.9633	Durbin-Watson stat		2.029716

Wages and employment can increase at the same time if the increase of Active Population are moderate, what implies that immigration policies should have into account the economic circumstances of labour markets.

Equation 3. Wage equation in the European Union at PPPs

Dependent Variable: W90EUPP				
Method: Least Squares				
Sample(adjusted): 1966 1997				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
W90EUPP(-1)	0.993266	0.005976	166.2094	0.0000
D(GDPEUPP/LTEU)	0.701908	0.163630	4.289590	0.0002
R-squared	0.992004	Mean dependent var		20.81881
Adjusted R-squared	0.991738	S.D. dependent var		3.577678
S.E. of regression	0.325197	Akaike info criterion		0.651690
Sum squared resid	3.172590	Schwarz criterion		0.743298
Log likelihood	-8.427034	Durbin-Watson stat		1.592136

Equation 4. LS estimation of the wage equation in the United States

Dependent Variable: W90U				
Method: Least Squares				
Sample(adjusted): 1965 2000				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
W90U(-1)	1.004428	0.002128	472.0785	0.0000
D(GDPU/LTU)	0.404031	0.089677	4.505397	0.0001
R-squared	0.987278	Mean dependent var		30.05437
Adjusted R-squared	0.986903	S.D. dependent var		2.448655
S.E. of regression	0.280225	Akaike info criterion		0.347504
Sum squared resid	2.669884	Schwarz criterion		0.435478
Log likelihood	-4.255077	Durbin-Watson stat		1.240624

Equation 5. GLS estimation of the wage equation in the United States

Dependent Variable: W90U				
Method: Generalized Least Squares				
Sample(adjusted): 1966 2000				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
W90U(-1)	1.007231	0.003212	313.5937	0.0000
D(PM90U)	0.290775	0.088991	3.267447	0.0026
AR(1)	0.468930	0.186539	2.513849	0.0172
R-squared	0.987413	Mean dependent var		30.19761
Adjusted R-squared	0.986627	S.D. dependent var		2.326343
S.E. of regression	0.269024	Akaike info criterion		0.293787
Sum squared resid	2.315972	Schwarz criterion		0.427103
Log likelihood	-2.141274	Durbin-Watson stat		1.904045

Finally equation 6 shows the positive impact of human capital on real Gdp with an small pool of the European Union and the USA during the period 1995-2000. Similar results have been found with wider samples. This equation shows autocorrelation due to the effects of ommitted variables. The non significance of the variable related with education (Tyr=Total years of education per adult inhabitant) is probably due to the high degree of multicollinearity with Research and Development expenditure (RD). Both variables have shown a positive and significan effect in other studies. In future papers we will present more complete results on this regard.

Equation 6. Gdp per inhabitant and human capital in a pool of EU and USA

Dependent Variable: GDP00?H				
Method: Pooled Least Squares				
Sample(adjusted): 1995 2000				
Number of cross-sections used: 2. Panel (balanced) observations 12				
White Heteroskedasticity-Consistent Standard Errors & Covariance				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
GDP00?H(-1)	1.016760	0.001456	698.2514	0.0000
D(RD00?H(-1))	10.88644	1.593560	6.831523	0.0001
D(TYR?)	0.620133	0.470738	1.317364	0.2203
R-squared	0.999764	Mean dependent var		25.91126
Adjusted R-squared	0.999711	S.D. dependent var		6.735607
S.E. of regression	0.114470	Sum squared resid		0.117931
Log likelihood	10.70810	F-statistic		19038.27
Durbin-Watson stat	2.535116	Prob(F-statistic)		0.000000

As analysed in Guisan(2005) and other studies, the effects of investment on employment are generally positive when there are not restrictions from demand or supply to approximately full capacity utilization. When those restrictions strongly limit the capacity utilization, investment has mainly substitution effects and can lead to a diminution of employment. The increase of real wages is positively affected by productivity increase and, for a given or increasing level of employment, productivity increase requires a high rate of growth of real Gdp. Accordingly to the economic literature and our own results here shown, the main variable to have into account in EU policies to reach the rates of employment, wages and real Gdp per inhabitant of the US, is real Gdp per inhabitant, and thus European policies should be addressed that way. It is really outstanding the higher support of the USA to RD and

Education in comparison with the low values of European Union, and EU should address their policies to reach a fast convergence with the levels of the USA.

4. European labour policies: suggestions and conclusions.

This study shows that the lower rates of employment and wages in EU in comparison with the USA are mainly due to the lower endowment of human capital in Europe and other factors that lead to a lower level of real Gdp per inhabitant. In the case of EU the high taxes and contributions to social security, on compensations of employees, have a role to explain although not the main one. Education and RD expenditures should be increased while taxes and contributions on labour should be diminished. Besides there is the effect of the high increase of net migration from outside the EU, which should be moderated in order to avoid negative effects on the rates of employment, average wage and public expenditure per inhabitant. These objectives could be compatible with an increasing role of EU to foster international cooperation to development, with more foreign investments from EU in developing countries and other kind of cooperation. There is need of more dialogue between European institutions and associations of socio-economic researchers, ONGs related with development and other social groups interested in improving the role of EU in international cooperation to development.

EU authorities have expressed their opinion in favour of free movements of workers between the 10 new EU countries, after 2004's enlargement, and the previous EU15 countries. The freedom of labourers movements withing EU could be positive for all the parts implied (region of origin and region of destination) if there are some complementary policies regarding moderation of immigration from non EU countries and better EU regional policies of development for all regions. The succesful development of those policies imply more dialogue between EU policy makers and the European civil society, having into account realistic views from several social groups, including economics researchers who have made interesting contributions on European labour markets, regional development and related fields, and support of EU policies to research and publications by researchers in this regard.

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¹ available at <http://www.usc.es/economet/ea.htm>

² available at <http://ideas.repec.org>

Annex

Data: Wages, Gdp and Employment of European Union (EU and the US (U)
W90= Wage(average) in thousand dollars at 1990 prices and exchange rates
(Calculated as Compensation of Employees divided by the number of Employees)
GDP90= Gross Domestic Product in Bn dollars at 1990 prices and exchange rates
LT = Employment in thousands
PM = Mean productivity of labour (GDP90/LT) (thousand \$90)
PH = Production per inhabitant (GDP90/POP) (thousand \$90). POP is population

obs	W90U	GDP90U	LTU	PMU	PHU	W90EU	GD90EU	LTEU	PMEU	PHEU
1964	24.691	2641.400	71323	37.034	13.765	14.326	3052.540	140624	21.707	9.349
1965	25.041	2789.300	73034	38.192	14.355	15.009	3186.910	140841	22.628	9.678
1966	25.614	2955.200	75017	39.394	15.035	15.606	3309.940	140974	23.479	9.970
1967	26.032	3035.700	76590	39.636	15.277	16.163	3416.310	139936	24.413	10.225
1968	26.687	3163.000	78173	40.462	15.759	16.954	3590.910	139870	25.673	10.687
1969	27.249	3247.400	80140	40.522	16.023	17.865	3812.440	140750	27.087	11.274
1970	27.729	3254.400	80796	40.279	15.871	19.301	3999.470	141647	28.235	11.751
1971	28.097	3348.000	81340	41.161	16.122	20.311	4128.790	141819	29.113	12.051
1972	28.873	3519.100	83966	41.911	16.766	21.314	4309.180	141719	30.407	12.504
1973	29.308	3701.400	86838	42.624	17.467	22.298	4558.650	143494	31.769	13.159
1974	28.766	3686.700	88515	41.651	17.239	22.968	4648.240	144482	32.172	13.359
1975	28.843	3671.500	87524	41.948	17.000	23.789	4618.390	142983	32.300	13.224
1976	29.350	3850.500	90420	42.585	17.660	24.718	4824.200	143014	33.732	13.766
1977	29.425	4014.600	93673	42.858	18.228	25.136	4953.840	143352	34.557	14.091
1978	29.576	4213.600	97679	43.137	18.930	25.863	5097.900	143750	35.464	14.453
1979	29.461	4319.000	100421	43.009	19.191	26.323	5282.680	145101	36.407	14.926
1980	29.320	4294.500	100907	42.559	18.856	26.333	5358.150	145820	36.745	15.084
1981	29.399	4367.000	102042	42.796	18.990	26.436	5364.110	144568	37.104	15.047
1982	29.637	4278.500	101194	42.280	18.427	26.381	5412.070	143631	37.680	15.152
1983	29.653	4424.300	102509	43.160	18.882	26.584	5509.360	142962	38.537	15.402
1984	29.943	4691.900	106702	43.972	19.852	26.769	5642.500	143337	39.365	15.752
1985	30.357	4845.900	108855	44.517	20.321	27.076	5784.050	143951	40.181	16.120
1986	30.596	4987.100	111303	44.807	20.723	27.731	5948.490	144951	41.038	16.545
1987	30.793	5121.300	114177	44.854	21.092	28.272	6117.730	147061	41.600	16.978
1988	31.245	5314.300	116677	45.547	21.689	28.687	6366.020	149355	42.624	17.610
1989	30.921	5489.100	119029	46.116	22.192	28.939	6582.690	151617	43.417	18.140
1990	30.936	5554.100	119550	46.458	22.224	29.379	6742.040	154346	43.681	18.495
1991	31.032	5498.500	118441	46.424	21.711	28.461	6813.030	154029	44.232	18.603
1992	31.393	5653.200	119164	47.441	22.028	29.120	6877.700	152269	45.168	18.690
1993	31.614	5790.400	120791	47.937	22.270	29.161	6837.950	148825	45.946	18.495
1994	31.786	6004.500	124478	48.237	22.814	29.136	7041.030	148649	47.367	18.979
1995	32.123	6158.800	126242	48.786	23.125	29.290	7209.820	149960	48.078	19.376
1996	32.546	6378.700	128000	49.834	23.673	29.397	7332.530	150894	48.594	19.652
1997	33.155	6629.500	130543	50.784	24.312	29.501	7527.170	152216	49.451	20.118
1998	34.118	6915.700	132692	52.118	25.067	29.662	7745.458	154852	50.018	20.640
1999	35.050	7202.100	134692	53.471	25.808	29.928	7946.840	157445	50.474	21.134
2000	36.289	7474.200	138082	54.129	26.492	30.180	8217.033	160760	51.114	21.787

Source: Given by or elaborated from OECD National Accounts and Labour Force Statistics